

## Claims

1. Pharmaceutical composition, containing a combination of active substances, comprising a selenium-containing active substance and a corticoid.
2. Pharmaceutical composition according to claim 1, characterized in that the combination of active substances furthermore comprises insulin.
3. Pharmaceutical composition according to one of claims 1 or 2, characterized in that the active substances are each present separately in separate forms of administration.
4. Pharmaceutical composition according to any of Claims 1 – 3, characterized in that the active substances are present in aqueous solution.
5. Method according to one of claims 1 to 4, characterized in that each active substance is present in a form suited for i.v. application.
6. Pharmaceutical composition according to one of claims 1 to 5, characterized in that the concentration of selenium ranges from 5 - 500 µg/ml, preferably 50 µg/ml, and the concentration of corticoid ranges from 0.5-50 mg/ml, preferably 5 mg/ml.
7. Pharmaceutical composition according to one of claims 1 to 6, characterized in that the selenium is present in a form selected from pharmaceutically acceptable selenium salts.
8. Pharmaceutical composition according to claim 7, characterized in that the selenium-containing active substance is present as sodium selenite, preferably sodium selenite x 5H<sub>2</sub>O.
9. Pharmaceutical composition according to one of claims 1 to 8, characterized in that the corticoid is selected from glucocorticoids.
10. Pharmaceutical composition according to claim 9, characterized in that the corticoid is hydrocortisone.

11. Use of a combination of active substances as stated in one of claims 1 to 10, for treating sepsis, SIRS and/or septic shock.
12. Use according to claim 11, characterized in that at least 100 µg, preferably at least 1000 µg, selenium are administered per day.
13. Use according to claim 12, characterized in that at least 3340 µg sodium selenite x 5H<sub>2</sub>O are administered per day.
14. Use according to one of claims 12 or 13, characterized in that the administration of the selenium-containing active substance is effected by means of a bolus once a day.
15. Use according to one of claims 12 to 14, characterized in that the administration of the selenium-containing active substance is effected over a period of at least 7 days, preferably at least 14 days.
16. Use according to one of claims 11 to 15, characterized in that an additional basis application of at least 20 µg, preferably at least 35 µg, sodium selenite x 5H<sub>2</sub>O is effected per day.
17. Use according to one of claims 11 to 16, characterized in that at least 50 mg, preferably at least 200 mg, hydrocortisone are administered per day.
18. Use according to claim 17, characterized in that the hydrocortisone is continuously administered over 24 hours.
19. Use according to one of claims 17 or 18, characterized in that the hydrocortisone treatment is effected for at least 2, preferably at least 5 days.
20. Use according to one of claims 11 to 19, characterized in that additionally insulin is administered, such that the blood sugar does not exceed 200 mg%.

21. Use of a selenium-containing active substance in the therapy of sepsis, SIRS, and/or septic shock with hydrocortisone.